DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022219 Address: 333 Burma Road **Date Inspected:** 29-Mar-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang and Zhu Zhong Hai No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A Delayed / Cancelled:

34-0006 **Bridge No: Component: OBG** Trial Assembly

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Bike Path at Bay #8

This QA Inspector performed Dimension Control Inspection on the Bike Path bottom plate for flatness check across the longitudinal butt weld. Flatness check was performed on following mentioned Bike Paths and Bike Path are identified as:

BK004A-060.

The QA Inspector measured the flatness using 600mm long straight edge across the Butt (CJP) weld and using 1500mm long straight edge between the stiffeners which are plug weld to bottom plate.

Observed flatness within the allowable tolerance.

The result of the inspection was informed to ZPMC QC Supervisor Mr. Liu Fawen, ABF Mr. Wang Zhong Yuan

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and Caltrans Lead Inspector Mr. Mark Miller.

Traveler Rails at Bay # 10

This QA Inspector performed Dimension Control Inspection on the Traveler Rails 26TR2 for the following measurements and observed measured dimension in compliance contact document. Inspection was performed against the Inspection Notification # 08660 dated Mar 29, 2011.

Traveler Rails Thickness at typical section.

Traveler Rails Flange width at typical section.

Traveler Rails Depth at typical section.

Traveler Rails Flange curl at typical section.

Traveler Rails Traveler Rail length.

Traveler Rails Sweep.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition. The result of the inspection was informed to ZPMC QC Mr. Jiang Xiao Bo, ABF Mr. Tang Fi Heng and Caltrans Lead Inspector Mr. Mark Miller.

Please reference the pictures attached for more comprehensive details.

Segment 12AW(Service Platform Anchor Bracket)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The weld joint was designated as Seg3004AD-001. The welder identification was 046709 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-Tc-U4b-FCM-1. The piece mark was identified as Service Platform Anchor Bracket welded at Edge Panel at PP 109.5, Cross Beam side.

Please reference the pictures attached for more comprehensive details.

Segment 12AE(Service Platform Anchor Bracket)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The weld joint was designated as Seg3001AD-007. The welder identification was 047752 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-Tc-U4b-FCM-1. The piece mark was identified as Service Platform Anchor Bracket welded at Edge Panel at PP 109.5, Cross Beam side.

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Please reference the pictures attached for more comprehensive details.

Segment 12AW(Longitudinal Diaphragm)

This QA Inspector observed ZPMC personnel installing the splice plate at web location of Longitudinal Diaphragm between PP 111 to PP 111.5 at Segment 12AW at work point W3.

Please reference the pictures attached for more comprehensive details.

Segment 13AW (Edge Panel I- Stiffener)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The Weld joint was designated as Seg3013Q-086. The welder identification was 069683 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-Tc-U4b-FCM-1. The piece mark was identified as the weld connecting the Edge Panel I-Stiffener at Cross Beam side.

Segment 13AW (Bottom Panel I- Stiffener)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The Weld joint was designated as Seg3013Q-086. The welder identification was 048433 and observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-B-T-2233-ESAB. The piece mark was identified as the weld connecting the Bottom Panel I-Stiffener at Cross Beam side between work point E4 and work point E14.

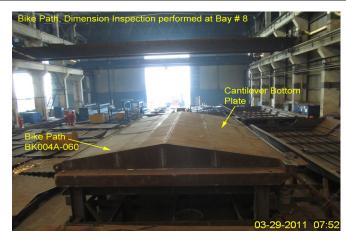
Segment 13AE (Side Panel to Floor Beam)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The Weld joint was designated as Seg3007AD-134. The welder identification was 067183 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-Tc-U4b-FCM-1. The piece mark was identified as the weld connecting the Side Panel to Floor Beam at PP 119(+1500mm).

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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Inspected By: Math, Manjunath Quality Assurance Inspector **Reviewed By:** Miller,Mark QA Reviewer